

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	6	"6734559".pn. "6203613".pn. "6204168".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 15:44
L2	920	438/652.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 15:49
L3	1898	438/687.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 15:49
L4	1455	438/618.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 15:49
L5	1420	257/750.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 15:49
L6	1583	257/751.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 15:49
L7	2896	438/637.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 15:49
L8	8888	L2 L3 L4 L5 L6 L7	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 15:49
L9	2	8 and (ald with (cap capping) with (copper cu))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 15:57

## EAST Search History

L10	775	8 and ((cap capping) with nitride)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 15:57
L11	67	10 and (cyclical ald pulsing)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 16:50
L12	1	("cyclical deposition" with "cap layer;").clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 17:19
L13	2981	257/e21.579.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 17:19
S19	764095	"438"/\$.ccls. or semic or ic or "257"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/19 15:18
S20	22	(dual with damascene) and (ald with (cap capping) with layer)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 15:48
S21	2	("20030139034"   "6528428").PN. OR ("6849536").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/13 10:43
S22	4	(dual with damascene) and (ald with (cap capping) with (copper cu))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/04/15 15:43
S23	4	("6197688" "6365527").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/13 10:48
S24	56	("3844799"   "5063169"   "5079600"   "5169680"   "5266446"   "5447887"   "5674787"   "5824599"   "5913147"   "5953594"   "5969422"   "6077780").PN. OR ("6197688").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/13 11:02

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S25	1	"6358849".pn.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/13 11:02
S26	2	"6358849".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/13 11:12
S27	82	TaN with ALD with (barrier cap capping)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/13 11:17
S28	4	("6391785" "6534395").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/13 11:23
S29	145	("20020037630" "20020041931" "20020043666" "20020048635" "20020048880" "20020052097" "20020055235" "20020061612" "20020061612" "20020064970" "20020068458" "20020073924" "20020074588" "20020076481" "20020076507" "20020076508" "20020076837" "20020081826" "20020081844" "20020086111" "20020086507" "20020090829" "20020093046" "20020093781" "20020094689" "20020096775" "20020098627" "20020102834" "20020102840" "20020104481" "20020105088" "20020106536" "20020106846" "20020109168" "20020117399" "20020121241" "20020121342" "20020121697" "20020135071" "20020144655" "20020144657" "20020146511" "20020146895" "20020151152" "20020153579" "20020155722" "20020162506" "20020164421" "20020164423" "20020177282" "20020182320" "20020187256" "20020187631" "20020197402" "20030013300" "20030013320" "20030031807" "20030031807" "20030032281" "20030042630" "20030049942" "20030054631" "20030072975" "20030079686" "20030082300" "20030089308" "20030101927" "20030104126" "20030129826" "20030134508" "20030143839" "20030143841" "20030165615" "20030168750" "20030173586" "20030186495" "20030205729").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/13 11:38

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S30	2	"6951804".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/13 11:38
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S31	174	("20010000866"   "20010009140"   "20010011526"   "20010031562"   "20010034123"   "20010041250"   "20010042799"   "20020094632"   "20020127336"   "4058430"   "4389973"   "4413022"   "4486487"   "4767494"   "4806321"   "4813846"   "4829022"   "4834831"   "4838983"   "4838993"   "4840921"   "4845049"   "4859625"   "4859627"   "4861417"   "4876218"   "4917556"   "4927670"   "4931132"   "4951601"   "4960720"   "4975252"   "4993357"   "5000113"   "5013683"   "5028565"   "5082798"   "5085885"   "5091320"   "5130269"   "5166092"   "5173474"   "5186718"   "5205077"   "5221449"   "5225366"   "5234561"   "5246536"   "5250148"   "5254207"   "5256244"   "5259881"   "5270247"   "5278435"   "5281274"   "5286296"   "5290748"   "5294286"   "5296403"   "5300186"   "5311055"   "5316615"   "5316793"   "5330610"   "5336324"   "5338389"   "5348911"   "5374570"   "5395791"   "5438952"   "5439876"   "5441703"   "5443033"   "5443647"   "5455072"   "5458084"   "5469806"   "5480818"   "5483919"   "5484664"   "5503875"   "5521126"   "5527733"   "5532511"   "5540783"   "5580380"   "5601651"   "5609689"   "5616181"   "5637530"   "5641984"   "5644128"   "5667592"   "5674786"   "5693139"   "5695564"   "5705224"   "5707880"   "5711811"   "5730801"   "5730802"   "5747113"   "5749974"   "5788447"   "5788799"   "5796116"   "5801634"   "5807792"   "5830270"   "5835677"   "5851849"   "5855675"   "5855680"   "5856219"   "5858102"   "5866213"   "5866795"   "5879459"   "5882165"   "5882413"   "5904565"   "5916365").PN. OR ("5923056"   "5923985"   "5925574"   "5928389"   "5942040"   "5947710"   "5951771"   "5972430"   "5989999"   "6001415"   "6001669"   "6013575"   "6015590"   "6025627"   "6036773"   "6042652"   "6043177"   "6051286"   "6062798"   "6067222"   "6071808"   "6084307"   "6086677"	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/14 07:52
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S32	4	("6124203" "6203613").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/14 07:52
S33	118	("4058430"   "4861417"   "5166092"   "5256244").PN. OR ("6203613"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/14 07:56

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S34	261	("20010000866"   "20010002280"   "20010009140"   "20010009695"   "20010011526"   "20010013312"   "20010014371"   "20010024387"   "20010025979"   "20010028924"   "20010034123"   "20010041250"   "20010042523"   "20010042799"   "20010054377"   "20010054730"   "20010054769"   "20020000196"   "20020000598"   "20020007790"   "20020009544"   "20020020869"   "20020021544"   "20020031618"   "20020041931"   "20020048635"   "20020052097"   "20020060363"   "20020066411"   "20020068458"   "20020073924"   "20020076481"   "20020076507"   "20020076508"   "20020076837"   "20020086106"   "20020086111"   "20020086507"   "20020092471"   "20020092584"   "20020094689"   "20020098627"   "20020098685"   "20020104481"   "20020106536"   "20020106846"   "20020108570"   "20020117399"   "20020121241"   "20020121342"   "20020122884"   "20020127336"   "20020127745"   "20020134307"   "20020144655"   "20020144657"   "20020146511"   "20020155722"   "20020162506"   "20020164421"   "20020164423"   "20020177282"   "20020182320"   "20020187256"   "20020187631"   "20020197402"   "20030004723"   "20030010451"   "20030013320"   "20030022338"   "20030031807"   "20030032281"   "20030042630"   "20030049931"   "20030049942"   "20030053799"   "20030054631"   "20030057526"   "20030057527"   "20030059538"   "20030072913"   "20030072975"   "20030075273"   "20030075925"   "20030079686"   "20030082296"   "20030082301"   "20030082307"   "20030089308"   "20030096468"   "20030097013"   "20030101927"   "20030106490").PN. OR ("20030108674"   "20030113187"   "20030116087"   "20030121469"   "20030121608"   "20030124262"   "20030129308"   "20030129826"   "20030134508"   "20030140854"   "20030140857"   "20030143328"   "20030143747"   "20030143839"   "20030153177"   "20030168750"   "20030172872"   "20030173586"   "20030186495"   "20030190423"   "20030190804"   "20030194493"   "20030198754"   "20030205729"	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/14 08:00
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S35	18	("5191099"   "5429989"   "5639691"   "5659057"   "6017818"   "6077768"   "6077781"   "6081034"   "6203613"   "6204172"   "6271595"   "6351036"   "6372518"   "6376349"   "6403414").PN. OR ("6518167").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/14 09:22
S36	13	("3765956"   "5324684"   "5391517"   "5447887"   "5489550"   "5529954"   "5633047"   "5855993").PN. OR ("6271595").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/14 10:19
S37	1	"20040187304".pn.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/04/14 10:19
S38	844	438/652.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/15 12:40
S39	1681	438/687.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/15 12:41
S40	1242	438/618.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/15 12:41
S41	1335	257/750.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/15 12:41
S42	1438	257/751.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/15 12:41
S43	2557	438/637.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/17 07:28
S44	1995	S43 and @ad<="20030107"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/17 07:37



## EAST Search History

S45	2	"20030077916".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/17 07:58
S46	2	"6204168".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/04/17 07:58
S47	155	"tantalum nitride" with (ALD cyclical pulse pulsing)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/19 15:19
S48	504	("tantalum nitride" TaN) with (ALD cyclical pulse pulsing)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/19 15:28
S49	253	S48 and (@ad>"20030107" or @rlad>"20030107")	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/19 15:29
S50	0	S49 not S49	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/19 15:21
S51	251	S48 not S49	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/19 15:21
S52	408	("tantalum nitride" TaN) with cap	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/19 15:28
S53	195	S52 and (@ad>"20030107" or @rlad>"20030107")	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/19 15:29
S54	213	S52 not S53	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/19 15:29

## EAST Search History

S55	2	"6204168".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/20 12:06
S56	1004	438/638.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/20 13:57
S57	639	S56 and "dual damascene"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/20 15:47
S58	2022	parker.xa.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/20 15:47
S59	11	parker-john-m.xa.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/09/20 15:47
S60	2	"6204168".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/05 10:38